

# How can we improve and future-proof HIV care?

**Value-based healthcare** is an effective tool to meet current and future HIV care needs, provided:

- It considers a **comprehensive definition of value** that includes a **public health perspective**
- Its value drivers are translated into concrete **value-based objectives and activities**
- Its implementation explicitly considers a **comprehensive set of indicators** to measure performance and quality

## A PUBLIC HEALTH VALUE-BASED HEALTHCARE PARADIGM FOR HIV

### Background

HIV patients face considerable acute and chronic healthcare needs and battling the HIV epidemic remains of the utmost importance. By focusing on health outcomes in relation to the cost of care, value-based healthcare (VBHC) proposes a strategy to optimize quality of care and cost-efficiency. Its implementation may provide an answer to the increasing pressure to optimize spending in healthcare while improving patient outcomes. This poster describes a pragmatic value-based healthcare framework for HIV care.

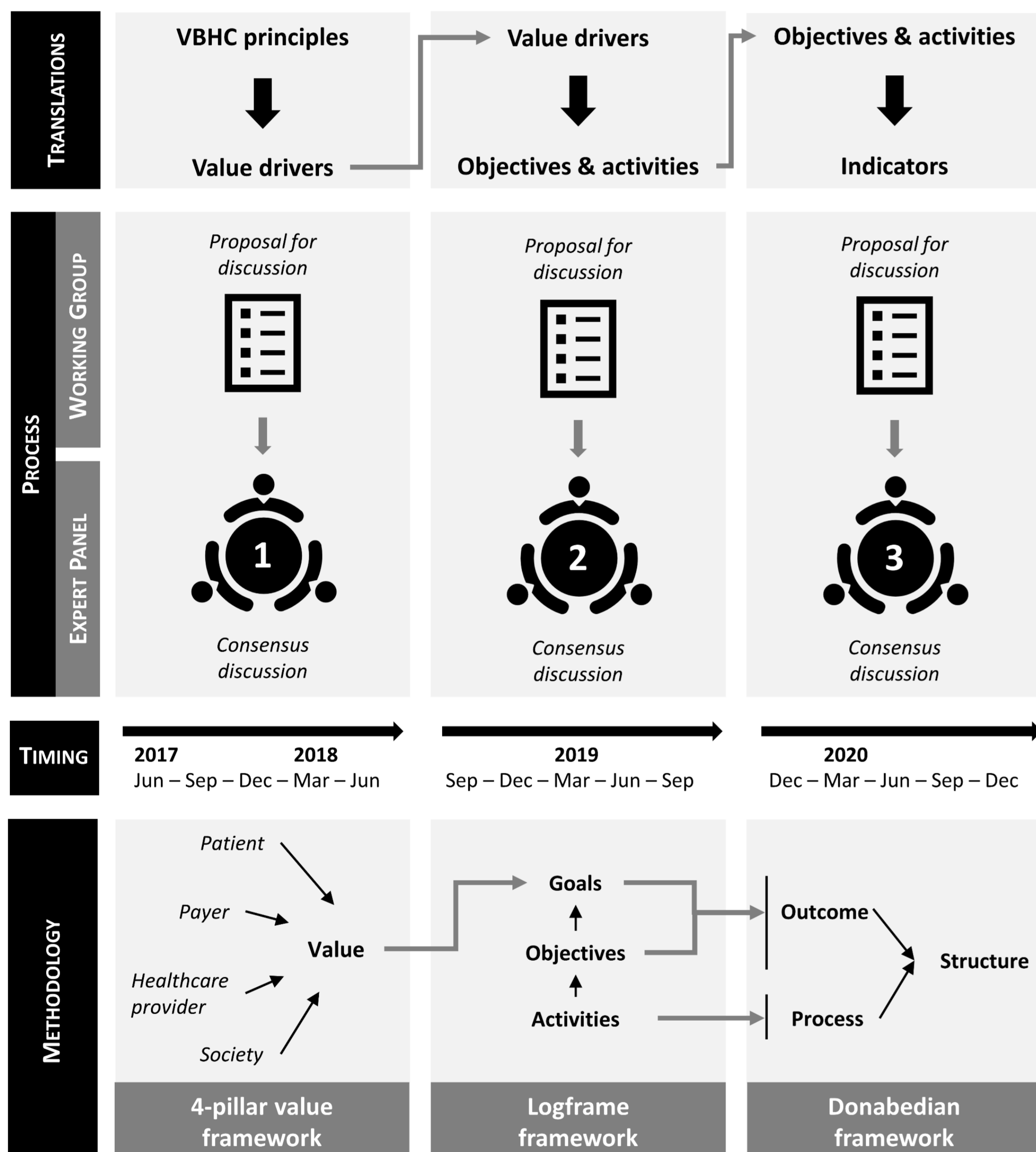
### Methods

#### Roundtable discussions:

**16** clinical stakeholder representatives from Belgian HRC  
**2** value-based healthcare experts

### Results - Our Value-based HIV care framework

DRIVER	Objective	Activity	Indicators
<b>PREVENT NEW INFECTIONS</b>			
			# of new HIV infections
			Rate hiv incidence per 100 000 population
<b>Provide and support combined prevention</b>			
	PrEP	Ensure that people at risk of hiv acquisition have access to PrEP	# of individuals who were newly enrolled on oral antiretroviral PrEP # of individuals, inclusive of those newly enrolled, that received oral antiretroviral PrEP
	PEP	Provide access to PEP	# of individuals who receive PEP
	Prevent mother-to-child transmission	Provide ART to pregnant women living with hiv	% children newly infected with HIV from mother-to-child transmission % Pregnant women with controlled VL
<b>Provide education and increase awareness</b>			
	To/in target populations (MSM, migrants, PWID, ...)	Increase number of people informed about existing prevention measures towards HIV/STI	% Target population informed on existing prevention measures towards HIV and STI
	To/in the healthcare professionals	Ensure that all HCPs receive training on combination prevention tools	% and # Of health care providers who receive training on combination prevention tools
<b>Provide prevention services (condom use, counseling on risk reduction strategies, chemsex, hiv testing, ...)</b>			
	To/in target populations (MSM, migrants, PWID, ...)	Increase number of people who receive prevention services	% and # Of target population who receive prevention services
<b>IMPROVE THE CASCADE OF CARE</b>			
			Rate. Number of people that have died from aids-related causes per 100 000 population
<b>Reduce the number of undiagnosed patients</b>			
		Provide (targeted) testing	% of undiagnosed PLWH # of tests performed annually
		Provide access to decentralized testing	Y/N Availability of decentralized testing
		Provide access to community testing	Y/ N Availability of community testing
		Aim for early diagnosis	% and # of late diagnoses
<b>Link diagnosed patients to care</b>			
		Quick follow-up by reference center	% of diagnosed PLWH linked to care % and # of newly diagnosed PLWH that are seen by hiv specialist within 2 weeks of diagnosis
<b>Retain patients in care</b>			
		Re-engage patients lost-to follow-up	% of PLWH retained in care % and # of PLWH that were contacted after a standard defaulting period
		Regular follow-up of patients	% and # of PLWH that were re-entered in care after a standard defaulting period % and # of PLWH that have at least 1 follow-up visit in the reporting period # of multidisciplinary team meetings over the course of the reporting period
<b>Achieve and maintain virologic control</b>			
		Initiate ART treatment	% and # of people on ART among PLWH
		Follow-up ART treatment	% of PLWH that have at least 1 measurement of VL in the reporting period
		Remediate non-controlled viral load	% of PLWH with abnormal VL that achieve controlled VL after follow-up
<b>PROVIDE PATIENT-CENTERED HIV CARE</b>			
<b>Support patient's quality of life</b>			
		Measure at least once per year QoL	% of PLWH with good QoL as measured by standardized tool % of patients in follow-up with QoL being measured each year
		Provide at least once per year advice for mental wellbeing	# and % of patients having received support/advice for mental wellbeing
<b>Prevent and manage comorbidities</b>			
	Prevention	Screening for hiv/treatment-related comorbidities	Rate. Incidence of specific comorbidities per 100 000 population % of PLWH being annually screened for hiv/treatment related comorbidities % of PLWH with a smoking history documented in the last 2 years % of PLWH with blood pressure recorded in the last 15 months
	Management	Follow-up management of comorbidities	# and % of PLWH with known comorbidities % of PLWH with renal function being assessed annually
<b>Maintain sexual and reproductive health</b>			
		Support sexual well-being & reduce risk behavior	
		Screening for risk behaviour	# and % of patients in follow-up screened annually for risk behaviour
		Regular assessment of sexual wellbeing	# and % of patients in follow-up in which sexual wellbeing is assessed annually
		Refer patients with risky behaviour referred to prevention services	# and % of patients with risk behaviour referred to prevention services
		Provide sexual wellbeing counseling	# and % of patients in follow-up that received sexual wellbeing counseling
		Manage and reduce hepatitis B and C infection in the hiv/aids population	
		Provide routine hepatitis B testing	% of people starting ART who were tested for hepatitis B
		Provide suitable combination therapy to hiv/hbv co-infected people	% of people coinfected with hiv and hbv receiving combination treatment
		Provide routine hepatitis C testing	% of people starting ART who were tested for hepatitis C
		Provide suitable combination therapy to hiv/hbc co-infected people	% of people coinfected with hiv and hcv having received HCV treatment in the recorded year
<b>SUSTAINING A STATE OF THE ART DISEASE MANAGEMENT CONTEXT</b>			
<b>Support public health surveillance</b>			
		Provide data for national reporting	% Data completion
<b>Improve knowledge through research and training</b>			
		Provide training	
		Training of future HCW (for ARCs associated with teaching institutions)	# and type of training sessions
		Support training of volunteers for demedicalized testing	[Y/N] Availability of training protocol for training non-medical staff for demedicalized testing # Of accreditations awarded for demedicalized training
		Participate to training	# of training sessions to which members of the multidisciplinary ARC team assisted
		Continuous (medical) education for the multidisciplinary ARC team	
		Contribute / learn from scientific body of evidence	
		Contribute to scientific publications / research	# of studies to which the reference center or its team members have contributed # or publications (peer-reviewed / gray)
		Active participation to scientific events/meetings	# of scientific meetings organized / participated to by the reference center or its team members
		Support representative organizations	
		Organize / attend meetings with representative organizations	# of meetings to which reference center team members have participated



### Requirements external to the framework

- Support from a payment model that rewards delivery of value in care over volume in care;
- A performant IT system to support integrated care and the measurement of costs and outcomes.

### Limitations

- The framework was developed by HIV physicians and VBHC experts only, no other stakeholders have been directly involved; Our proposed framework may not be fully translatable to settings with an HIV epidemiology and/or healthcare structure strongly different from the Belgian setting;
- Explicit economic indicators are not included.

### Future work

- More explicit involvement of patient and payer stakeholders;
- Pilot implementation that includes evaluation of its economic impact, including on a health system and societal level.



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